

lectric signal into an optical signal. The optical signal from the electro-optic conversion part 12 propagates through the optical fiber 13 to the opto-electric conversion part 14. The opto-electric conversion part 14 re-converts the received optical signal into an electric signal.

Detailed Description Text - DETX (9):

In the above operation, the optical signal obtained by electro-optic conversion through direct intensity modulation is not only intensity-modulated but also frequency-modulated (chirping). Multiplexing the input signal with the pilot signal having a frequency lower than that of the input signal causes the spectrum of the optical signal to spread over a wide band due to frequency modulation, thereby resulting in reduction in power of the main mode.

Detailed Description Text - DETX (10):

The optical transmission apparatus thus suppresses SBS by multiplexing the input signal with the pilot signal.

Detailed Description Text - DETX (11):

On the other hand, such multiplexing causes intermodulation distortion between the input signal and the pilot signal. Of the intermodulation distortion, the present optical trans